

11009-22:JVD:371705

IN THE CLAIMS**Please amend claims 29-31, 33, 34, 36-40, 42 and 43 as follows.****Please cancel claims 28 and 35.**

1-19 (canceled)

20 (previously presented) A rotary die cutting apparatus for cutting a moving web of material having first and second opposing faces into blanks, said apparatus comprising:

a pair of cylinders in peripheral contact;
a rotary die mounted to one of said cylinders, said rotary die having cutting elements thereon adapted to pierce both first and second faces and generate blanks and scrap portions from the moving web of material;

means for gripping scrap portions, said gripping means extending from said rotary die, said gripping means registering with at least some of said scrap portions as said die rotates, said gripping means sized and positioned so as to pierce through the first face of the moving web and not to pierce through the second face of the moving web; and

a stripping knife having an edge for contacting said scrap portions as said scrap portions are stripped away from said gripping means.

21. (previously presented) The apparatus of claim 20 wherein each said pair of cylinders have co-acting cutting elements thereon.

22. (previously presented) The apparatus of claim 21 wherein said gripping means has a top surface that does not extend above said cutting elements.

RESPONSE TO ADVISORY ACTION

Serial No. 10/630,342

Docket No. 11009-22

Page 3 of 11

11009-22:JVD:371705

23. (previously presented) The apparatus of claim 20 wherein said gripping means is integrally formed with said rotary die.

24. (previously presented) The apparatus of claim 20 wherein said gripping means includes a plurality of projections arranged in a pattern of isosceles triangles.

25. (previously presented) The apparatus of claim 24 wherein said a plurality of projections are approximately equally spaced apart.

26. (previously presented) The apparatus of claim 24 wherein for a web material having a thickness of about .010 inches said projections have a height of about .015 inches.

27. (previously presented) The apparatus of claim 24 wherein said projections are spaced together within a range of from about 25 to about 400 projections per square inch.

28. (cancelled)

29. (currently amended) The apparatus of claim [-28-] 34 wherein each said pair of cylinders have co-acting cutting elements thereon.

RESPONSE TO ADVISORY ACTION

Serial No. 10/630,342

Docket No. 11009-22

Page 4 of 11

11009-22:JVD:371705

30. (currently amended) The apparatus of claim [-28-] 34 wherein said gripping elements are integrally formed with one of said rotary dies using one of the methods of electrical discharge machining, photo-etching, and chemical etching.

31. (currently amended) The apparatus of claim [-28-] 34 wherein said gripping elements are arranged in a pattern of isosceles triangles.

32. (previously presented) The apparatus of claim 31 wherein said gripping elements are approximately equally spaced apart.

33. (currently amended) The apparatus of claim [-28-] 34 wherein for a web material having a thickness of about .010 inches said gripping elements have a height of about .015 inches.

34. (currently amended) [The apparatus of claim 33] A rotary die cutting apparatus for cutting a moving web of material into blanks, said apparatus comprising:
a pair of cylinders in peripheral contact;
a rotary die removably mounted to one of said cylinders, at least one of said rotary dies having a cutting element thereon adapted to generate blanks and scrap portions from the moving web of material, the outer edge of said cutting element being located a first distance from the centerline of the one said cylinder;

a plurality of gripping elements extending from the one said cylinder, said gripping elements registering with at least some of said scrap portions as said cylinders rotate, said

RESPONSE TO ADVISORY ACTION

Serial No. 10/630,342

Docket No. 11009-22

Page 5 of 11

11009-22-JVD-371705

gripping elements sized and positioned so as not to pierce completely through said scrap portions, each said gripping element having a tip located from the centerline of the one said cylinder by a distance less than the first distance; and
a stripping knife having an edge for contacting said scrap portions as said scrap portions are stripped away from said gripping elements;

wherein said gripping elements are spaced together within a range of from about 25 to about 400 gripping elements per square inch.

35. (cancelled)

36. (currently amended) The apparatus of claim [-35-] 40 wherein each said pair of cylinders have co-acting cutting elements thereon.

37. (currently amended) The apparatus of claim [-35-] 40 wherein said gripping elements are fabricated integrally using one of the methods of electrical discharge machining, photo-etching, and chemical etching.

38. (currently amended) The apparatus of claim [-37-] 40 wherein said gripping elements are arranged in a pattern of isosceles triangles.

39. (currently amended) The apparatus of claim [-37-] 40 wherein said gripping elements have a height of about .015 inches.

RESPONSE TO ADVISORY ACTION
Serial No. 10/630,342
Docket No. 11009-22
Page 6 of 11

11009-22;JVD:371705

40. (currently amended) [The apparatus of claim 37] A rotary die cutting apparatus for cutting a moving web of material into blanks, said apparatus comprising:

a pair of cylinders in peripheral contact;

a rotary die mounted to one of said cylinders, said rotary die having cutting elements thereon adapted to generate blanks and scrap portions from the moving web of material;

a plurality of gripping elements extending from the one said cylinder, said gripping elements registering with at least some of said scrap portions as said cylinders rotate, said gripping elements sized and positioned so as to partially pierce through the thickness of said scrap portions, each said gripping element being integral with each other said gripping element; and

a stripping knife having an edge for contacting the leading edges of said scrap portions as said scrap portions are stripped away from said gripping elements;

wherein said gripping elements are spaced together within a range of from about 25 to about 400 gripping elements per square inch.

41. (previously presented) The rotary die cutting apparatus of claim 20 wherein said gripping means includes a plurality of gripping elements having the shape of truncated cones having an undercut upper portion.

42. (currently amended) [The rotary die cutting apparatus of claim 28] A rotary die cutting apparatus for cutting a moving web of material into blanks, said apparatus comprising:

RESPONSE TO ADVISORY ACTION
Serial No. 10/630,342
Docket No. 11009-22
Page 7 of 11

11009-22:JVD371705

a pair of cylinders in peripheral contact;

a rotary die removably mounted to one of said cylinders, at least one of said rotary dies having a cutting element thereon adapted to generate blanks and scrap portions from the moving web of material, the outer edge of said cutting element being located a first distance from the centerline of the one said cylinder;

a plurality of gripping elements extending from the one said cylinder, said gripping elements registering with at least some of said scrap portions as said cylinders rotate, said gripping elements sized and positioned so as not to pierce completely through said scrap portions, each said gripping element having a tip located from the centerline of the one said cylinder by a distance less than the first distance; and

a stripping knife having an edge for contacting said scrap portions as said scrap portions are stripped away from said gripping elements ;

wherein said gripping means includes a plurality of gripping elements having the shape of truncated cones having an undercut upper portion.

43. (currently amended) [The rotary die cutting apparatus of claim 35] A rotary die cutting apparatus for cutting a moving web of material into blanks, said apparatus comprising:

a pair of cylinders in peripheral contact;

a rotary die mounted to one of said cylinders, said rotary die having cutting elements thereon adapted to generate blanks and scrap portions from the moving web of material;

RESPONSE TO ADVISORY ACTION

Serial No. 10/630,342

Docket No. 11009-22

Page 8 of 11

BEST AVAILABLE COPY

11009-22:JVD:371705

a plurality of gripping elements extending from the one said cylinder, said gripping elements registering with at least some of said scrap portions as said cylinders rotate, said gripping elements sized and positioned so as to partially pierce through the thickness of said scrap portions, each said gripping element being integral with each other said gripping element; and

a stripping knife having an edge for contacting the leading edges of said scrap portions as said scrap portions are stripped away from said gripping elements;

wherein said gripping means includes a plurality of gripping elements having the shape of truncated cones having an undercut upper portion.

RESPONSE TO ADVISORY ACTION

Serial No. 10/630,342

Docket No. 11009-22

Page 9 of 11